K102989

PREMARKET NOTIFICATION [510(k)] Summary

nec - 9 2010

Company Name:

Chang Gung Medical Technology Co., Ltd.

5F., No. 201-32, Tung Hwa North Rd., Taipei (105), Taiwan, R.O.C.

Contact:

Bob Leiker

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U.S. Agent:

Bob Leiker

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E-mail: leiker-regulatory@sbcglobal.net

<u>Device</u> Name:

CGMC Diagnostic Doppler Ultrasound System OPUS 5000 with

CGMC CLA35 Curved Linear Array 4-8MHz,

CGMC LA75 Linear Array 5-10MHz. CGMC PA25 Phase Array 2-4MHz, and

CGMC TV65 Transvaginal Micro-Curved Linear Array 4-8MHz.

CGMC MCLA65 Micro Curved Linear Array 5-8MHz, CGMC LA80N 192 Elements Linear Array 5-12MHz. CGMC LA85N 192 Elements Linear Array 5-12MHz.

Common Name:

Diagnostic Ultrasound System

Classification Name: Regulatory Class: II

Review Category: Tier II

Classification Panel: Radiology

Ultrasonic Pulsed Echo Imaging System, 21 CFR 892,1560, 90-IYO Ultrasonic Pulsed Doppler Imaging System, 21 CFR 892,1550, 90-IYN Diagnostic Ultrasound Transducer 21 CFR 892.1570, Product Code 90-ITX

Registration Number: 3005706637

Factory Location: Chang Gung Medical Technology Co., Ltd. Linkou Factory

2F., No. 118, Nan Lin Rd., Taishan Shiang, Taipei (243), Taiwan, R.O.C.

Reason for Submission:

This summary of safety and effectiveness is provided as part of this Premarket Notification in compliance with the Safe Medical Device Act of 1990 revisions to 21 CFR, Part 807.92. Content and Format of a 510(k) Summary.

Predicate Device Comparison:

The SonoScape Ultrasound System SSI-1000 (K042369) is of a comparable and substantially equivalent type. It has the same technological characteristics, key safety and effectiveness features, physical design, and has the same intended uses and basic operating modes as the predicate device.

General Device Description:

The CGMC OPUS 5000 diagnostic doppler ultrasound system is a compact and portable diagnostic ultrasound device, have integrated preprogrammed color ultrasound imaging system, capable of producing high detail resolution intended for clinical diagnostic imaging applications. The user interface includes a specialized control keyboard and color 15-inch LCD display. The all digital architecture with progressive dynamic receive focusing allows the system to maximize the utility of all imaging transducers to enhance the diagnostic utility and confidence provided by the system. The exam dependent default setting allows the user to have minimum adjustment for imaging the patient, while the in depth soft-menu control allows the advanced user to set the system for different situations. The architecture allows cost-effective system integration to a variety of upgrade-able options and features.

The major features of the CGMC OPUS 5000:

- 64 Channel all digital beam former
- Progressive dynamic receive focusing
- Wide band all digital demodulation
- Native frequency digital scan converter
- OPUS 5000 can be hand carried for portable use
- Remote access image management through LAN port
- USB2.0 flash drive for image transport and software upgrade
- Supports 2D B-mode, M-mode, Harmonic Image, Color, Power Doppler, Pulse wave Doppler, and CW.

Intended Use:

The device is a general-purpose ultrasonic imaging instrument intended for use by a qualified physician for evaluation of Abdomen;Pediatric;Small Organ(breast,tests,thyroid);heart soft tissue;Peripheral Vascular;Musculo-skeletal(conventional);Ob/Gyn and Urology.

Technological Characteristics:

Display Modes	Single and dual 2-D; Display of Duplex 2-D/M-mode; 2-D/Pulsed Doppler and Triplex 2-D/CD/Pulsed Doppler image formats; Dual B and Color in real time.
Measurements	Distance; area; circumference; calipers; velocity, PI, RI. Cardiac and Vascular package.
Principle of Operation	Applying high voltage burst to the Piezoelectric material in the transducer and detect the reflected echo to construct the 2-D B-mode, Doppler color, and Doppler spectrum image for diagnostic purpose.

Operating	TGC 8 slider, +/- 24dB
Controls	Depth Range: 3 to 24 cm
	Image sector size: 32 lines to full B (256 lines)
	Image Sector position: Steering within full maximum
	B orientation flip: L/R key with marking on the screen
	B Dynamic range control: preset 5 curves over 50-90 dB
	Gray Scale Control: 8 Settings
	Focal Number: 16 focal zone setting
	B persistence: 30-90% recursive
	Image Processing: Smoothing, edge enhancement
	PW sweeping speed 2,4,8 sec over display.
	PW Wall filter setting: 16 settings, 0.25 to 20% of PRF
	PW sample volume: 0.5 to 10mm with 0.5mm step size.
	PW/B update: with UPDATE key
	PW cursor steering: Steer soft key
	 PW angle correction: 0 to 70 degree user control
	PW trace: Peak, Mean
	PW spectrum dynamic range: 5 preset curve over 15-48 dB
	 Spectrum baseline shift and invert
	 Color ROI setting: trackball and set key to control size and
	Color steering on flat probe: +, 0, -
	 Color Wall Filter: Color wall filter with 16 selection, 0.25-20%
	 Color & B priority: C-B priority soft menu
	 Color Packet size: preset per Exam range from 8 to 12
	 Color spatial filter: preset per Exam, horizontal, vertical, off
	 Zoom factor: 1 to 10 continuously
	Freeze control: Toggling freeze key
	 Cine control: step, play backward, play continuously
Acoustic	Track 3; MI, TIS, TIC, TIB
Output	Derated Ispta: 720mW/cm2 maximum, TIS/ITIB/TIC: 0.1-4.0 Range,
	Mechanical Index: 1.9 Maximum, or Derated Isppa: 190 W/cm 2max

SAFETY CONSIDERATIONS:

OPUS 5000 has been designed to meet the following voluntary and measurement standards:

- IEC 60601-1 Safety of Medical Electric Equipment
- AIUM/NEMA UD2 Acoustic Output Measurement Standard for Diagnostic Ultrasound Equipment
- AIUM NEMA UD3 Standard for Real-time Display of Thermal and Mechanical Acoustic Output Indices on Diagnostic Ultrasound Equipment
- Acoustic Output Measurement and Labeling Standard for Diagnostic Ultrasound Equipment Revision 1 (AIUM 1998)

Safety and EMC Requirements for Medical Equipment

- EN 60601-1
- EN 60601-1-1
- EN 60601-1-2
- EN 60601-2-37
- ISO 10993 Biocompatibility



Food and Drug Administration 10903 New Hampshire Avenue Silver Spring, MD 20993

Chang Gung Medical Technology Co., Ltd. % Mr. Bob Leiker
Manager
Leiker Regulatory & Quality
7263 Cronin Circle
DUBIN CA 94568

DEC - 9 2010

Re: K102989

Trade/Device Name: OPUS 5000 Diagnostic Doppler Ultrasound System

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYN, IYO, and ITX

Dated: September 29, 2010 Received: October 6, 2010

Dear Mr. Leiker:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the OPUS 5000 Diagnostic Doppler Ultrasound System, as described in your premarket notification:

Transducer Model Number

PA25-2.5 MHz Phased Array
CLA35-3.5 MHz Curved Linear Array
LA75-7.5 MHz Linear Array
TV65-6.5 MHz Transvaginal
MCLA65-6.5 MHz Micro Convex Transducer
LA80N-8.0 MHz 192 Element Linear Array
LA85N-8.5 192 Element Linear Array

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Lauren Hefner at (301) 796-6881.

Sincerely yours,

David G. Brown, Ph.D.

Acting Director

Division of Radiological Devices Office of *In Vitro* Diagnostic Device

Evaluation and Safety

Center for Devices and Radiological Health

Enclosure(s)

Tab 3 Indications For Use

K102989 DEC - 9 2010

510(k) Number (if known):

Device Name:

OPUS 5000 Diagnostic Doppler Ultrasound System

Indications for Use:

The device is a general-purpose ultrasonic imaging instrument intended for use by a qualified physician for evaluation of Abdomen, Cardiac, Small Organ (breast, tests, thyroid), heart soft tissue, Peripheral Vascular, Musculo-skeletal (conventional), Ob/Gyn and

Prescription Use (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Urology.

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Indications For Use

Tab 3

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System:

CGMC OPUS 5000

Diagnostic Ultrasound Pulsed Echo System

Diagnostic Ultrasound Pulsed Doppler Imaging System

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation									
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	M	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging			
Ophthalmic	Ophthalmic				- "							
Fetal Imaging&	Fetal											
Other	Abdominal	N	N	N		N	N	Note 1	N			
	Intra-operative Specify								•			
	Intra-operative Neuro						· · · · · · · · · · · · · · · · · · ·					
	Laparoscopic	1							-			
	Pediatric	N	N	N		N	N	Note 1	N			
	Small Organ (breast, thyroid, testes)	N	N	N		N	N	Note 1	N			
	Neonatal Cephalic											
	Adult Cephalic								 			
	Trans-rectal	N	N	N		N	N	Note 1	N			
	Trans-vaginal	N	N	N		N	N	Note 1	N			
	Trans-urethral							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	Trans-esoph.(non-Card)	1							· · · · · · · · · · · · · · · · · · ·			
	Musculo-skeletal (Conventional)	N	Ν	N	:	N	N	Note 1	N			
	Musculo-skeletal (Superficial)											
	Intravascular											
	Other (Ob/GYN)	N	N	N		N	N	Note 1	N			
Cardiac	Cardiac Adult	N	N	N	N	N	N	Note 1	N			
	Cardiac Pediatric											
	Intravascular(Cardiac)											
	Trans-esoph.(Cardiac)	1										
ļ	Intra-cardiac								· · · · · · · · · · · · · · · · · · ·			
	Other (specify)								·····			
Peripheral	Peripheral vessel	N	N	N		N	N	Note 1	N			
Vessel	Other (specify)	[

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use	X
(Part 21 CFR 801	Subpart D)

AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Office of In Vitro Diagnostic Device Evaluation and Safety
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Transducer:

PA25 - 2.5 MHz Phased Array

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation									
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	М	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging			
Ophthalmic	Ophthalmic							 -				
Fetal Imaging&	Fetal **											
Other	Abdominal											
	Intra-operative Specify											
	Intra-operative Neuro					7.0.1. <u>-</u> 0.						
	Laparoscopic											
	Pediatric								· · · · · · · · · · · · · · · · · · ·			
	Small Organ (specify)	Î										
	Neonatal Cephalic											
	Adult Cephalic					···			· · · · · · · · · · · · · · · · · · ·			
	Trans-rectal					*						
	Trans-vaginal	1										
	Trans-urethral	-							<u> </u>			
	Trans-esoph.(non-Card)	_										
	Musculo-skeletal (Conventional)			•								
	Musculo-skeletal (Superficial)					•						
	Intravascular											
	Other (Ob/GYN)								 			
Cardiac	Cardiac Adult	Р	Р	P	Р	P	P	Note 1	Р			
	Cardiac Pediatric											
	Intravascular(Cardiac)											
	Trans-esoph.(Cardiac)											
	Intra-cardiac							· · · · · · · · · · · · · · · · · · ·				
	Other (specify)											
Peripheral	Peripheral vessel											
Vessel	Other (specify)											

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Transducer:

CLA35 - 3.5 MHz Curved Linear Array

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application						Mode	of Operation		
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	М	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging
Ophthalmic	Ophthalmic	1							
Fetal Imaging&	Fetal								
Other	Abdominal	P	Р	Р		Р	Р	Note 1	P
	Intra-operative Specify	7				-			
	Intra-operative Neuro								
	Laparoscopic								
	Pediatric				_				
	Small Organ (specify)								·
	Neonatal Cephalic								
	Adult Cephalic	1		 					
	Trans-rectal	1					 		
	Trans-vaginal	+-							
	Trans-urethral						· · · · · · · · · · · · · · · · · · ·		
	Trans-esoph.(non-Card)	1							
	Musculo-skeletal (Conventional)					· · · · · · · · · · · · · · · · · · ·			
	Musculo-skeletal (Superficial)								
	Intravascular				· · · · · · · · · · · · · · · · · · ·	•			
	Other (Ob/GYN)	Р	Р	P		P	Р	Note 1	Р
Cardiac	Cardiac Adult								
	Cardiac Pediatric								
	Intravascular(Cardiac)								
	Trans-esoph.(Cardiac)								
	Intra-cardiac								
	Other (specify)	1						•	
Peripheral	Peripheral vessel								
Vessel	Other (specify)								
N = new indicati	on: P = nrev	ionely a	leare	d by FDA:	K090229		F.:	= added under this	ennendiy

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use _ (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Transducer:

LA75 - 7.5 MHz Linear Array

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation									
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	М	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging			
Ophthalmic	Ophthalmic	T-										
Fetal Imaging&	Fetal											
Other	Abdominal							· · · · · · · · · · · ·				
	Intra-operative Specify											
	Intra-operative Neuro											
	Laparoscopic						······································					
	Pediatric											
	Small Organ (breast, thyroid, testes)	Р	Р	P		P	Р	Note 1	Р			
	Neonatal Cephalic						-		· · · · · · · · · · · · · · · · · · ·			
	Adult Cephalic											
	Trans-rectal											
	Trans-vaginal											
	Trans-urethral								·			
	Trans-esoph.(non-Card)	1				····						
	Musculo-skeletal (Conventional)	Р	Р	P		Р	P	Note 1	Р			
	Musculo-skeletal (Superficial)						-, , , , , , , , , , , , , , , , , , , 		· · · · · · · · · · · · · · · · · · ·			
	Intravascular											
	Other (Ob/GYN)											
Cardiac	Cardiac Adult											
	Cardiac Pediatric											
	Intravascular(Cardiac)											
	Trans-esoph.(Cardiac)								· · · · · · · · · · · · · · · · · · ·			
	Intra-cardiac								· · · · · · · · · · · · · · · · · · ·			
	Other (specify)											
Peripheral	Peripheral vessel	Р	Р	Р		Р	Ρ	Note 1	. Р			
Vessel	Other (specify)											

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Transducer:

TV65 - 6.5 MHz Transvaginal

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation									
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	М	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging			
Ophthalmic	Ophthalmic	\neg		 					***			
Fetal Imaging&	Fetal								· · ·			
Other	Abdominal	1					· · · · · · ·					
	Intra-operative Specify	\top							· · · · · · · · · · · · · · · · · · ·			
	Intra-operative Neuro						····································					
	Laparoscopic											
	Pediatric											
	Small Organ (specify)					·						
	Neonatal Cephalic	1										
	Adult Cephalic											
	Trans-rectal	Р	Р	Р		Р	P	Note 1	P			
	Trans-vaginal	P	Р	Р		P	P	Note 1	<u>-</u>			
	Trans-urethral						- · · · · · · · · · · · · · · · · · · ·	1,010	· · · · · · · · · · · · · · · · · · ·			
	Trans-esoph.(non-Card)											
	Musculo-skeletal (Conventional)											
	Musculo-skeletal (Superficial)											
	Intravascular								<u> </u>			
	Other (Ob/GYN)	Р	P	Р		Р	Р	Note 1	P			
Cardiac	Cardiac Adult											
	Cardiac Pediatric								* 			
	Intravascular(Cardiac)	\top										
	Trans-esoph.(Cardiac)											
	Intra-cardiac				· · · · · · · · · · · · · · · · · · ·							
	Other (specify)			- , - , - , -								
Peripheral	Peripheral vessel											
Vessel	Other (specify)											

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use X (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

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Transducer:

MCLA65 - 6.5 MHz Micro Convex Transducer

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation							
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	M	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging	
Ophthalmic	Ophthalmic									
Fetal Imaging&	Fetal									
Other	Abdominal									
	Intra-operative Specify	1								
	Intra-operative Neuro									
	Laparoscopic					····				
	Small Organ (breast, thyroid, testes)	N	Ν	N		N	N	Note 1	N	
	Small Organ (specify)	N	N	N		N	N	Note 1	N	
	Neonatal Cephalic									
	Adult Cephalic	-				•• • • • • • • • • • • • • • • • • • • •				
	Trans-rectal			.,					·	
	Trans-vaginal					-				
	Trans-urethral									
	Trans-esoph.(non-Card)				·			····		
	Musculo-skeletal (Conventional)								<u> </u>	
	Musculo-skeletal (Superficial)						· · · · · · · · · · · · · · · · · · ·			
	Intravascular							· · · · · · · · · · · · · · · · · · ·		
	Other (Ob/GYN)									
Cardiac	Cardiac Adult	N	N	N		N	N	Note 1	N	
	Cardiac Pediatric									
	Intravascular(Cardiac)									
	Trans-esoph.(Cardiac)									
	Intra-cardiac							,		
	Other (specify)								· · · · · · · · · · · · · · · · · · ·	
Peripheral	Peripheral vessel									
Vessel	Other (specify)									

14 - hem indication:	N	=	new	indication;
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P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use X (Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use _____(21 CFR 807 Subpart C)

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Transducer:

LA80N - 8.0 MHz 192 Element Linear Array

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation							
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	8	PWD	CWD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging	
Ophthalmic	Ophthalmic									
Fetal Imaging&	Fetal									
Other	Abdominal	1								
	Intra-operative Specify						 		• • • •	
	Intra-operative Neuro									
	Laparoscopic	1						·		
	Pediatric									
	Small Organ (breast, thyroid, testes)	N	N	N		N	N	Note 1	N	
	Neonatal Cephalic									
	Adult Cephalic							<u> </u>		
	Trans-rectal									
	Trans-vaginal						·	<u> </u>		
	Trans-urethral	1								
	Trans-esoph.(non-Card)				· ··· · · · · · · · · · · · · · · · ·					
	Musculo-skeletal (Conventional)	N	N	N		N	N	Note 1	N	
	Musculo-skeletal (Superficial)									
	Intravascular									
	Other (Ob/GYN)									
Cardiac	Cardiac Adult									
	Cardiac Pediatric									
	Intravascular(Cardiac)									
	Trans-esoph.(Cardiac)								· · · · · · · · · · · · · · · · · · ·	
	Intra-cardiac									
	Other (specify)									
Peripheral	Peripheral vessel	N	N	N		N	N	Note 1	N	
Vessel	Other (specify)									

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use X (Part 21 CFR 801 Subpart D) AND/OR

Over-The-Counter Use _____(21 CFR 807 Subpart C)

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

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Division of Radiological Devices

Office of In Vitro Diagnostic Device Evaluation and Safety

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Indications For Use

510K K102989

Transducer:

LA85N - 8.5MHz 192 Element Linear Array

Diagnostic Ultrasound Transducer

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application			Mode of Operation							
General (TRACK 1 ONLY)	Specific (TRACKS 1 & 3)	В	М	PWD	CMD	Color Doppler	Power (Amplitude) Doppler	Other* Combined	Tissue Harmonic Imaging	
Ophthalmic	Ophthalmic									
Fetal Imaging&	Fetal									
Other	Abdominal			·		·· ·				
	Intra-operative Specify	1				·				
	Intra-operative Neuro	<u> </u>							· · · · · · · · · · · · · · · · · · ·	
	Laparoscopic									
	Pediatric					• • • • • • • • • • • • • • • • • • • •				
	Small Organ (breast, thyroid, testes)	N	N	N		N	N	Note 1	N	
	Neonatal Cephalic					· · · · · · · · · · · · · · · · · · ·				
	Adult Cephalic									
	Trans-rectal									
	Trans-vaginal									
	Trans-urethral								· ·	
	Trans-esoph.(non-Card)									
	Musculo-skeletal (Conventional)	N	N	N		N	N	Note 1	N	
	Musculo-skeletal (Superficial)									
	Intravascular								·	
	Other (Ob/GYN)									
Cardiac	Cardiac Adult									
	Cardiac Pediatric									
	Intravascular(Cardiac)						··		 	
	Trans-esoph.(Cardiac)									
	Intra-cardiac							 · · · · · · · 	···	
	Other (specify)								· · · · · · · · · · · · · · · · · · ·	
Peripheral	Peripheral vessel	N	N	N		N	N	Note 1	Ň	
Vessel	Other (specify)									

P = previously cleared by FDA; K090229

E = added under this appendix

Note 1: Combined includes: B/M; B/PWD; B/Color Doppler; B/Power Doppler; B/Color Doppler/PWD and B/Power Doppler/PWD

Prescription Use _	X
(Part 21 CFR 801	Subpart D)

AND/OR

Over-The-Counter Use (21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

(Division Sign-Off)

Division of Radiological Devices

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